

FIG. 1 (PRIOR ART)

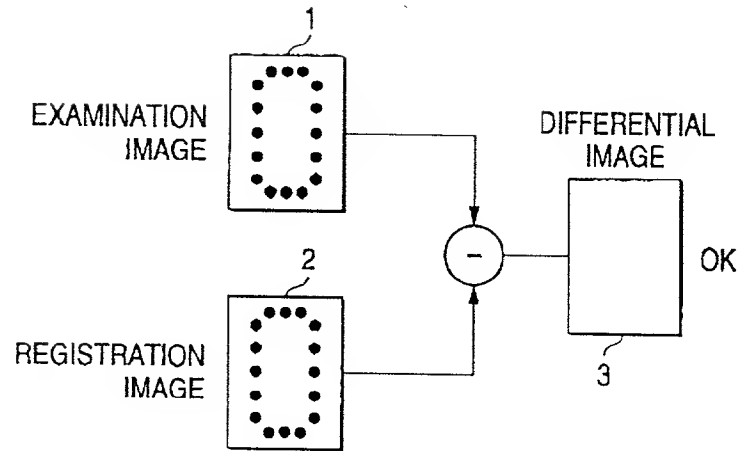


FIG. 2 (PRIOR ART)

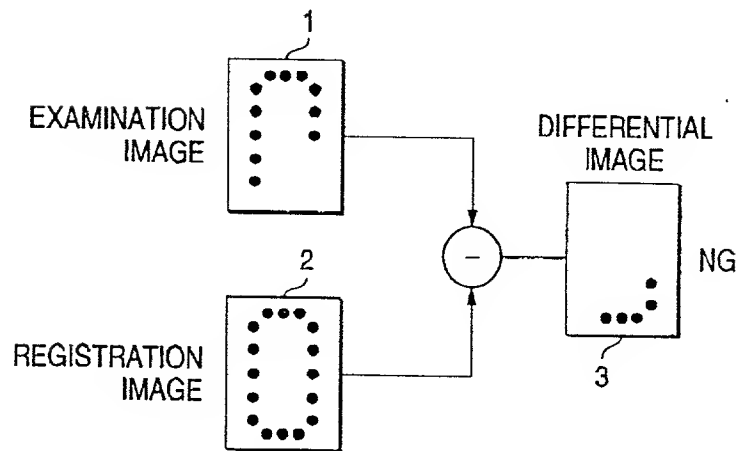


FIG. 3 (PRIOR ART)

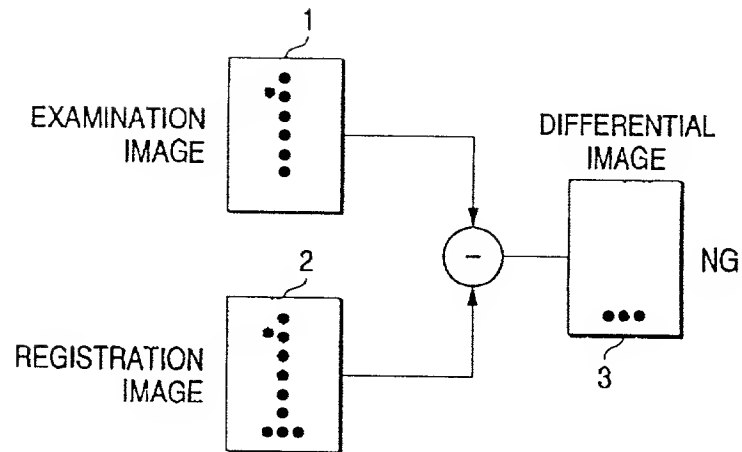


FIG. 4 (PRIOR ART)

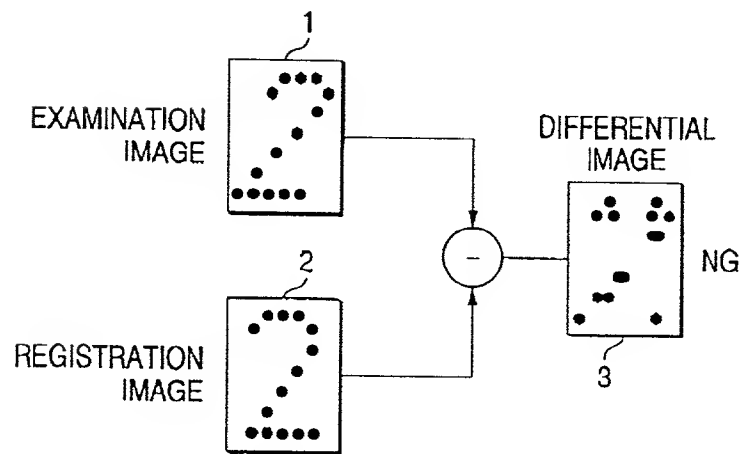


FIG. 5

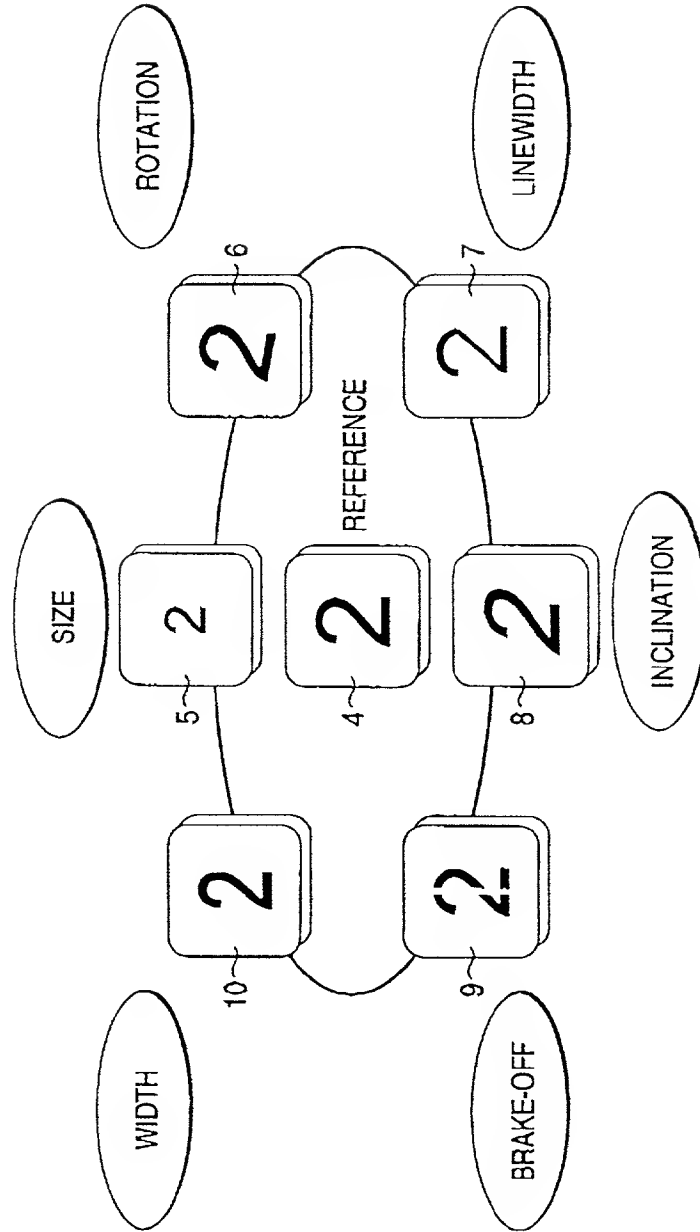


FIG. 6

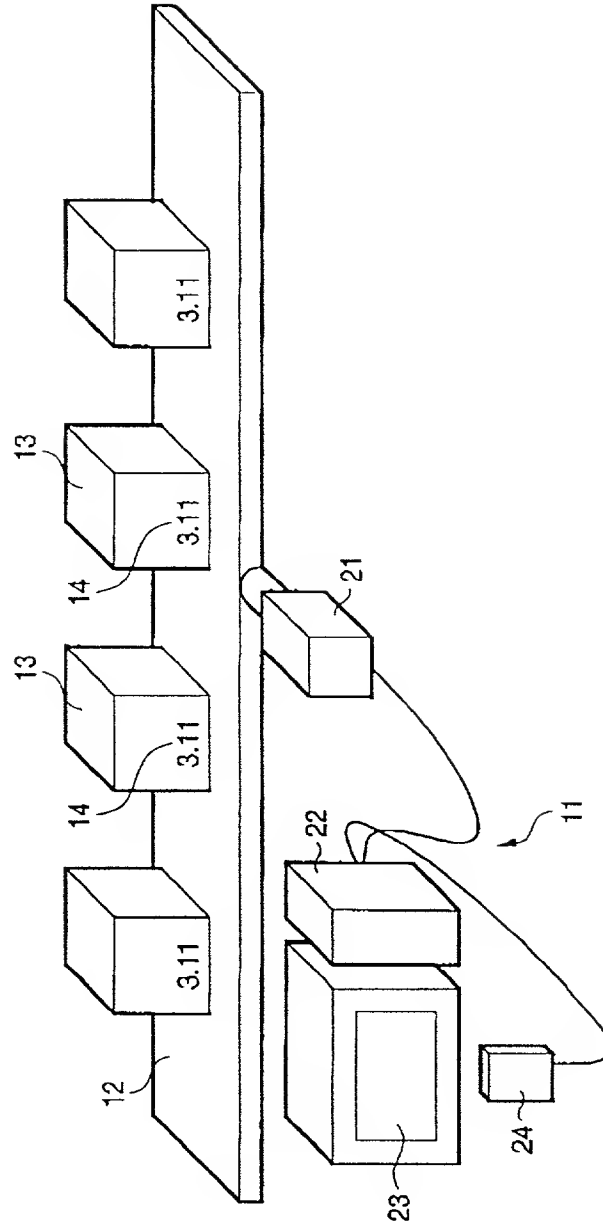


FIG. 7

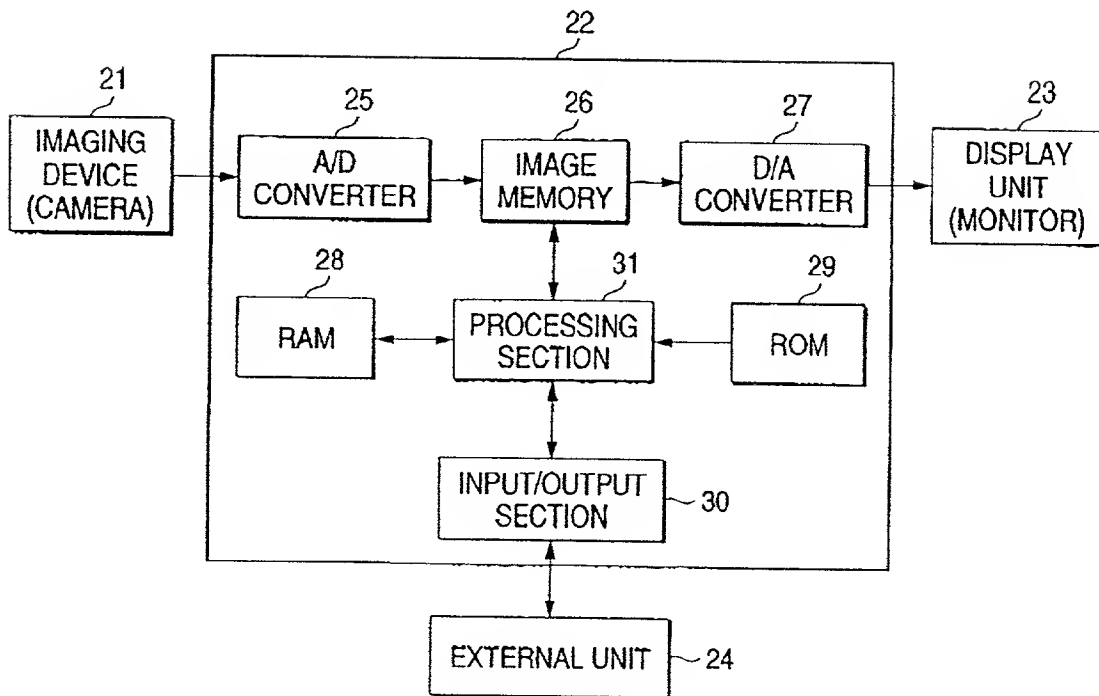


FIG. 8

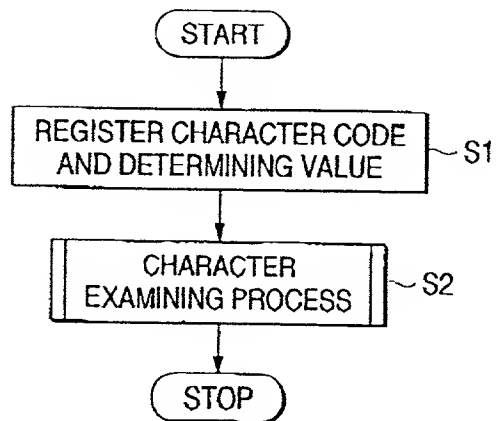
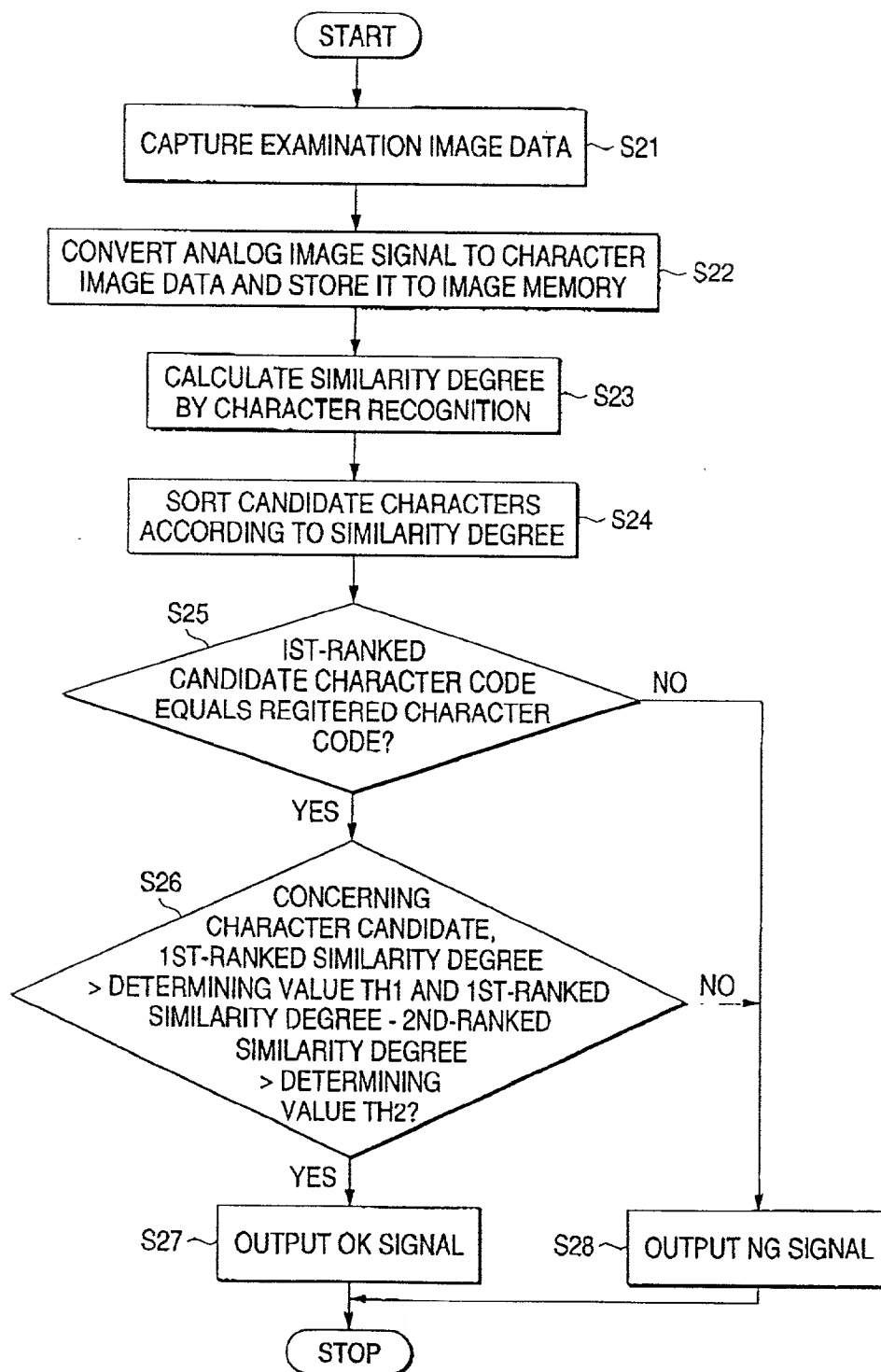


FIG. 9



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FIG. 10

EXAMINATION IMAGE

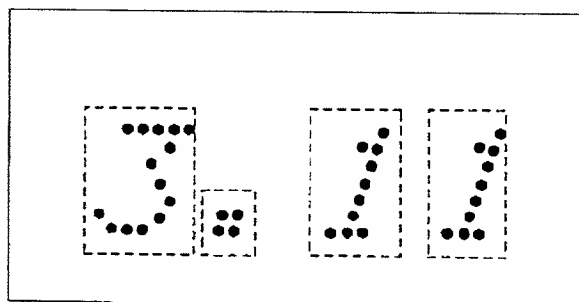


FIG. 11 (a)

CHARACTER CANDIDATE FOR "3"

RANK	CANDIDATE	SIMILARITY DEGREE
1	3	89
2	B	50
3	8	45

FIG. 11 (b)

CHARACTER CANDIDATE FOR "."

RANK	CANDIDATE	SIMILARITY DEGREE
1	.	95
2	.	50
3	.	40

FIG. 11 (c)

CHARACTER CANDIDATE FOR "1"

RANK	CANDIDATE	SIMILARITY DEGREE
1	1	85
2	1	60
3	/	36

FIG. 11 (d)

CHARACTER CANDIDATE FOR "1"

RANK	CANDIDATE	SIMILARITY DEGREE
1	1	86
2	1	65
3	/	45

FIG. 12 (a)

EXAMINATION IMAGE

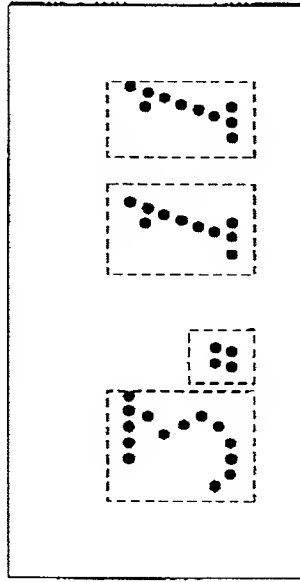
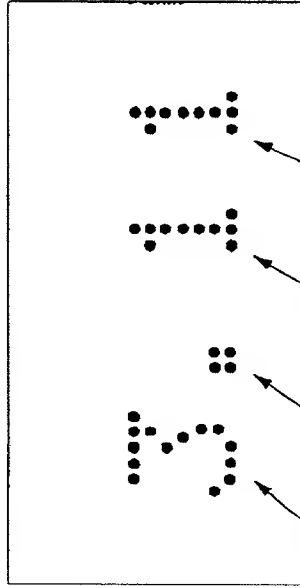


FIG. 12 (b)

CHARACTER STRING OF 1ST-RANKED CANDIDATE



=

(COLLATION)

FIG. 12 (c)

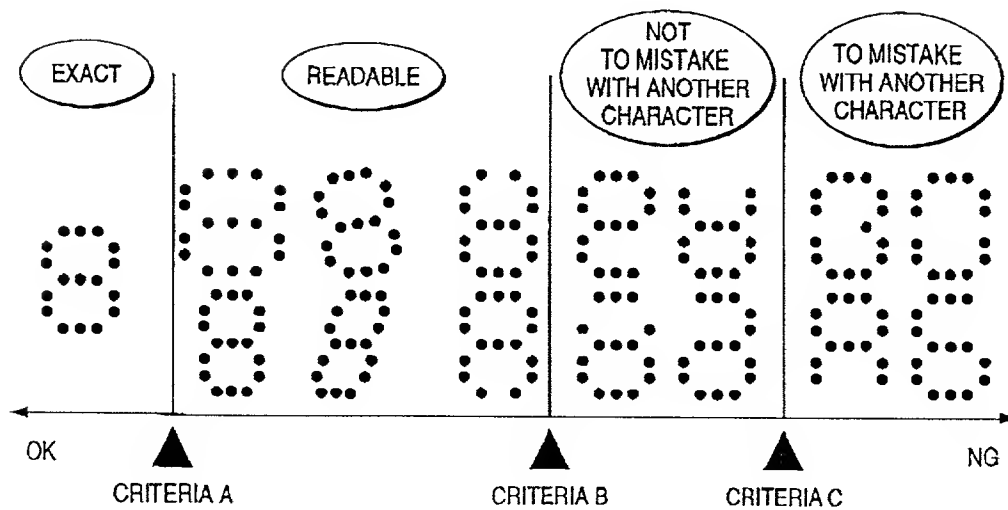
REGISTERED CHARACTER STRING	3	.	1	1
CHARACTER CODE (ASCII CODE, ETC.)	0 x 0033	0 x 002e	0 x 0031	0 x 0031

FIG. 13

1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4

FIG. 14

EXAMINATION IMAGE



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FIG. 15

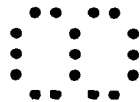
	DETERMINING VALUE TH1	DETERMINING VALUE TH2
CRITERIA A	90	30
CRITERIA B	70	30
CRITERIA C	70	10

(NORMALIZED WITH 100)

EXAMINATION
IMAGE

FIG. 16 (a)

EXACT



SIMILARITY DEGREE

RANK	CANDIDATE	SIMILARITY DEGREE
1	8	98
2	B	55
3	G	20

EVALUATION FORMULA

1ST-RANKED SIMILARITY DEGREE (98)
> EVALUATION VALUE TH1 (90)
2ND-RANKED - 1ST-RANKED SIMILARITY DEGREE (38)
> EVALUATION VALUE TH2 (20)

OUTPUT

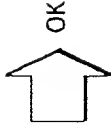


FIG. 16 (b)

READABLE



RANK	CANDIDATE	SIMILARITY DEGREE
1	8	85
2	B	55
3	G	20

1ST-RANKED SIMILARITY DEGREE (85)
< EVALUATION VALUE TH1 (90)
2ND-RANKED - 1ST-RANKED SIMILARITY DEGREE (25)
> EVALUATION VALUE TH2 (20)

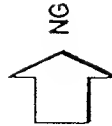
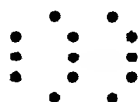


FIG. 16 (c)

NOT TO MISTAKE WITH
ANOTHER CHARACTER



RANK	CANDIDATE	SIMILARITY DEGREE
1	8	72
2	B	55
3	G	20

1ST-RANKED SIMILARITY DEGREE (72)
< EVALUATION VALUE TH1 (90)
2ND-RANKED - 1ST-RANKED SIMILARITY DEGREE (17)
< EVALUATION VALUE TH2 (20)

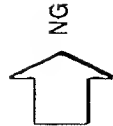


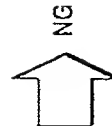
FIG. 16 (d)

TO MISTAKE WITH
ANOTHER CHARACTER



RANK	CANDIDATE	SIMILARITY DEGREE
1	8	85
2	3	80
3	g	50

1ST-RANKED SIMILARITY DEGREE (85)
< EVALUATION VALUE TH1 (90)
2ND-RANKED - 1ST-RANKED SIMILARITY DEGREE (5)
< EVALUATION VALUE TH2 (20)







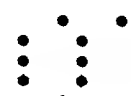



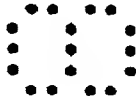
EXAMINATION IMAGE	SIMILARITY DEGREE	EVALUATION FORMULA	OUTPUT												
<div>FIG. 17 (a)</div> <div>EXACT</div> 	<table><tr><th>RANK</th><th>CANDIDATE</th><th>SIMILARITY DEGREE</th></tr><tr><td>1</td><td>8</td><td>98</td></tr><tr><td>2</td><td>B</td><td>55</td></tr><tr><td>3</td><td>G</td><td>20</td></tr></table>	RANK	CANDIDATE	SIMILARITY DEGREE	1	8	98	2	B	55	3	G	20	<div>1ST-RANKED SIMILARITY DEGREE (98) > EVALUATION VALUE TH1 (70)</div> <div>2ND-RANKED - 1ST-RANKED SIMILARITY DEGREE (38) > EVALUATION VALUE TH2 (20)</div>	OK 
RANK	CANDIDATE	SIMILARITY DEGREE													
1	8	98													
2	B	55													
3	G	20													
<div>FIG. 17 (b)</div> <div>READABLE</div> 	<table><tr><th>RANK</th><th>CANDIDATE</th><th>SIMILARITY DEGREE</th></tr><tr><td>1</td><td>8</td><td>85</td></tr><tr><td>2</td><td>B</td><td>55</td></tr><tr><td>3</td><td>G</td><td>20</td></tr></table>	RANK	CANDIDATE	SIMILARITY DEGREE	1	8	85	2	B	55	3	G	20	<div>1ST-RANKED SIMILARITY DEGREE (85) > EVALUATION VALUE TH1 (70)</div> <div>2ND-RANKED - 1ST-RANKED SIMILARITY DEGREE (25) > EVALUATION VALUE TH2 (20)</div>	OK 
RANK	CANDIDATE	SIMILARITY DEGREE													
1	8	85													
2	B	55													
3	G	20													
<div>FIG. 17 (c)</div> <div>NOT TO MISTAKE WITH ANOTHER CHARACTER</div> 	<table><tr><th>RANK</th><th>CANDIDATE</th><th>SIMILARITY DEGREE</th></tr><tr><td>1</td><td>8</td><td>72</td></tr><tr><td>2</td><td>B</td><td>55</td></tr><tr><td>3</td><td>G</td><td>20</td></tr></table>	RANK	CANDIDATE	SIMILARITY DEGREE	1	8	72	2	B	55	3	G	20	<div>1ST-RANKED SIMILARITY DEGREE (72) > EVALUATION VALUE TH1 (70)</div> <div>2ND-RANKED - 1ST-RANKED SIMILARITY DEGREE (17) < EVALUATION VALUE TH2 (20)</div>	NG 
RANK	CANDIDATE	SIMILARITY DEGREE													
1	8	72													
2	B	55													
3	G	20													
<div>FIG. 17 (d)</div> <div>TO MISTAKE WITH ANOTHER CHARACTER</div> 	<table><tr><th>RANK</th><th>CANDIDATE</th><th>SIMILARITY DEGREE</th></tr><tr><td>1</td><td>8</td><td>85</td></tr><tr><td>2</td><td>3</td><td>80</td></tr><tr><td>3</td><td>g</td><td>50</td></tr></table>	RANK	CANDIDATE	SIMILARITY DEGREE	1	8	85	2	3	80	3	g	50	<div>1ST-RANKED SIMILARITY DEGREE (85) > EVALUATION VALUE TH1 (70)</div> <div>2ND-RANKED - 1ST-RANKED SIMILARITY DEGREE (5) < EVALUATION VALUE TH2 (20)</div>	NG 
RANK	CANDIDATE	SIMILARITY DEGREE													
1	8	85													
2	3	80													
3	g	50													

FIG. 18 (a)

EXACT

EXAMINATION
IMAGE



SIMILARITY DEGREE

RANK	CANDIDATE	SIMILARITY DEGREE
1	B	98
2	B	55
3	G	20

EVALUATION FORMULA

1ST-RANKED SIMILARITY DEGREE (98)
> EVALUATION VALUE TH1 (70)
2ND-RANKED - 1ST-RANKED SIMILARITY DEGREE (38)
> EVALUATION VALUE TH2 (10)

OUTPUT

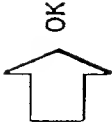
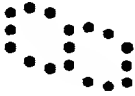


FIG. 18 (b)

READABLE



RANK	CANDIDATE	SIMILARITY DEGREE
1	B	85
2	B	55
3	G	20

1ST-RANKED SIMILARITY DEGREE (85)
> EVALUATION VALUE TH1 (70)
2ND-RANKED - 1ST-RANKED SIMILARITY DEGREE (25)
> EVALUATION VALUE TH2 (10)

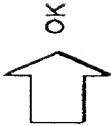


FIG. 18 (c)

NOT TO MISTAKE WITH
ANOTHER CHARACTER



RANK	CANDIDATE	SIMILARITY DEGREE
1	B	72
2	B	55
3	G	20

1ST-RANKED SIMILARITY DEGREE (72)
> EVALUATION VALUE TH1 (70)
2ND-RANKED - 1ST-RANKED SIMILARITY DEGREE (17)
> EVALUATION VALUE TH2 (10)

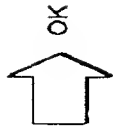


FIG. 18 (d)

TO MISTAKE WITH
ANOTHER CHARACTER



RANK	CANDIDATE	SIMILARITY DEGREE
1	B	85
2	3	80
3	g	50

1ST-RANKED SIMILARITY DEGREE (85)
> EVALUATION VALUE TH1 (70)
2ND-RANKED - 1ST-RANKED SIMILARITY DEGREE (5)
< EVALUATION VALUE TH2 (20)

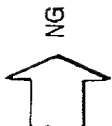


FIG. 19

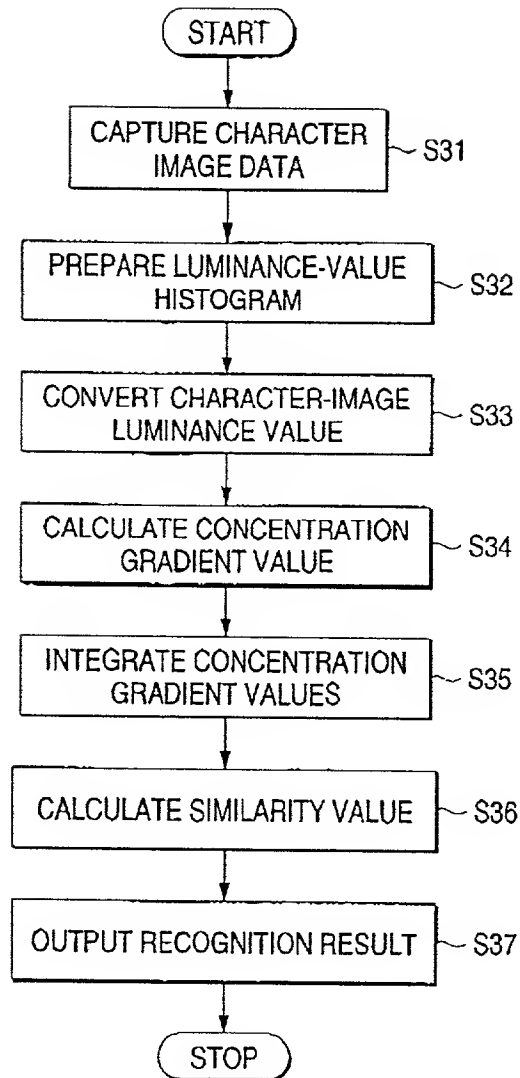


FIG. 20

90	90	90	100	100	130	110	90	90	80	90	90	90	90
100	100	100	100	110	150	130	100	90	90	90	90	90	90
110	110	110	110	130	130	170	150	110	90	90	90	90	90
150	180	170	170	170	170	170	170	170	170	170	170	170	170
130	130	140	160	160	110	90	130	180	170	130	110	120	120
80	90	100	150	160	130	80	110	170	160	130	90	80	70
50	80	90	110	150	130	90	90	160	170	150	80	90	70
50	80	90	90	100	130	150	140	170	140	120	100	80	80
70	90	100	90	110	150	190	180	150	110	80	90	80	80
80	90	90	120	130	150	180	200	160	130	90	90	80	70
80	90	100	110	150	170	100	100	170	170	130	90	80	80
90	100	130	150	130	110	90	90	110	180	160	100	80	80
130	150	170	130	110	90	90	90	100	110	120	150	180	130
150	180	110	120	100	90	90	90	90	110	110	170	160	190

FIG. 21

LUMINANCE VALUE	LUMINANCE
0	0
10	0
20	0
30	0
40	0
50	1
60	1
70	4
80	20
90	48
100	18
110	21
120	6
130	20
140	3
150	15
160	8
170	22
180	7
190	1
200	1
210	0
220	0
230	0
240	0
250	0
260	0

FIG. 22

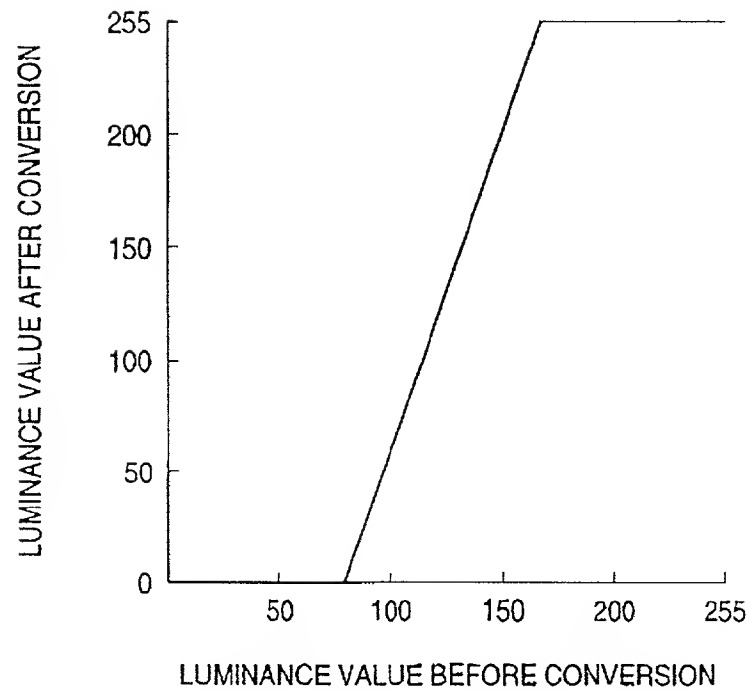


FIG. 23

LUMINANCE VALUE BEFORE CONVERSION (X)	LUMINANCE VALUE AFTER CONVERSION (Y)
$X \leq 80$	$Y = 0$
$80 < X < 170$	$Y = \frac{255}{(170 - 80)} X - \frac{80 \times 255}{(170 - 80)}$
$170 \leq X$	$Y = 255$

FIG. 24

28	28	28	57	57	142	85	28	28	0	28	28	28	28
57	57	57	57	85	198	142	57	28	28	28	28	28	28
85	85	85	85	142	142	255	198	85	28	28	28	28	28
198	255	255	255	255	255	255	255	255	255	255	255	255	255
142	142	170	227	227	85	28	142	255	255	142	85	113	113
0	28	85	198	227	142	0	57	255	227	142	28	0	0
0	0	28	85	198	142	28	28	227	255	198	0	28	0
0	0	28	28	57	142	198	170	255	170	113	57	0	0
0	28	57	28	85	198	255	255	198	85	0	28	0	0
0	28	28	113	142	198	255	255	227	142	28	28	0	0
0	28	57	85	198	255	57	57	255	255	142	28	0	0
28	57	142	198	142	85	28	28	85	255	227	85	0	0
142	198	255	142	85	28	28	28	57	85	113	198	255	142
198	255	85	113	57	28	28	28	28	85	85	255	227	225

FIG. 25 (a)

1	2	1
0	0	0
-1	-2	-1

FIG. 25 (b)

2	1	0
1	0	-1
0	-1	-2

FIG. 25 (c)

1	0	-1
2	0	-2
1	0	-1

FIG. 25 (d)

0	-1	-2
1	0	-1
2	1	0

FIG. 25 (e)

-1	-2	-1
0	0	0
1	2	1

FIG. 25 (f)

-2	-1	0
-1	0	1
0	1	2

FIG. 25 (g)

-1	0	1
-2	0	2
-1	0	1

FIG. 25 (h)

0	1	2
-1	0	1
-2	-1	0

FIG. 26 (a)

	a1	a2	a3	
	a4	a5	a6	
	a7	a8	a9	

FIG. 26 (b)

m1	m2	m3
m4	m5	m6
m7	m8	m9

FIG. 27 (a)

	d1	d2	d5	d6
	d3	d4	d7	d8

FIG. 27 (b)

	D1	D2	

FIG. 28

0.0	0.024	0.03	0.024	0.0
0.024	0.06	0.08	0.06	0.024
0.03	0.08	0.11	0.08	0.03
0.024	0.06	0.08	0.06	0.024
0.0	0.024	0.03	0.024	0.0

FIG. 29

•		•		•		•
•		•		•		•
•		•		•		•
•		•		•		•

FIG. 30

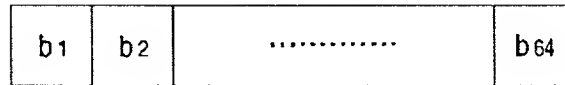


FIG. 31

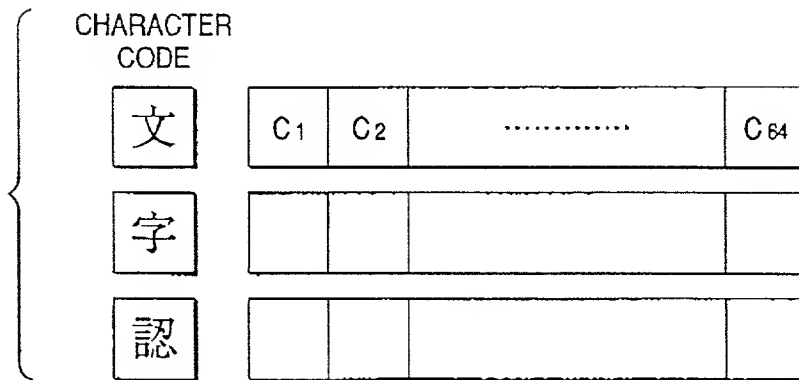


FIG. 32

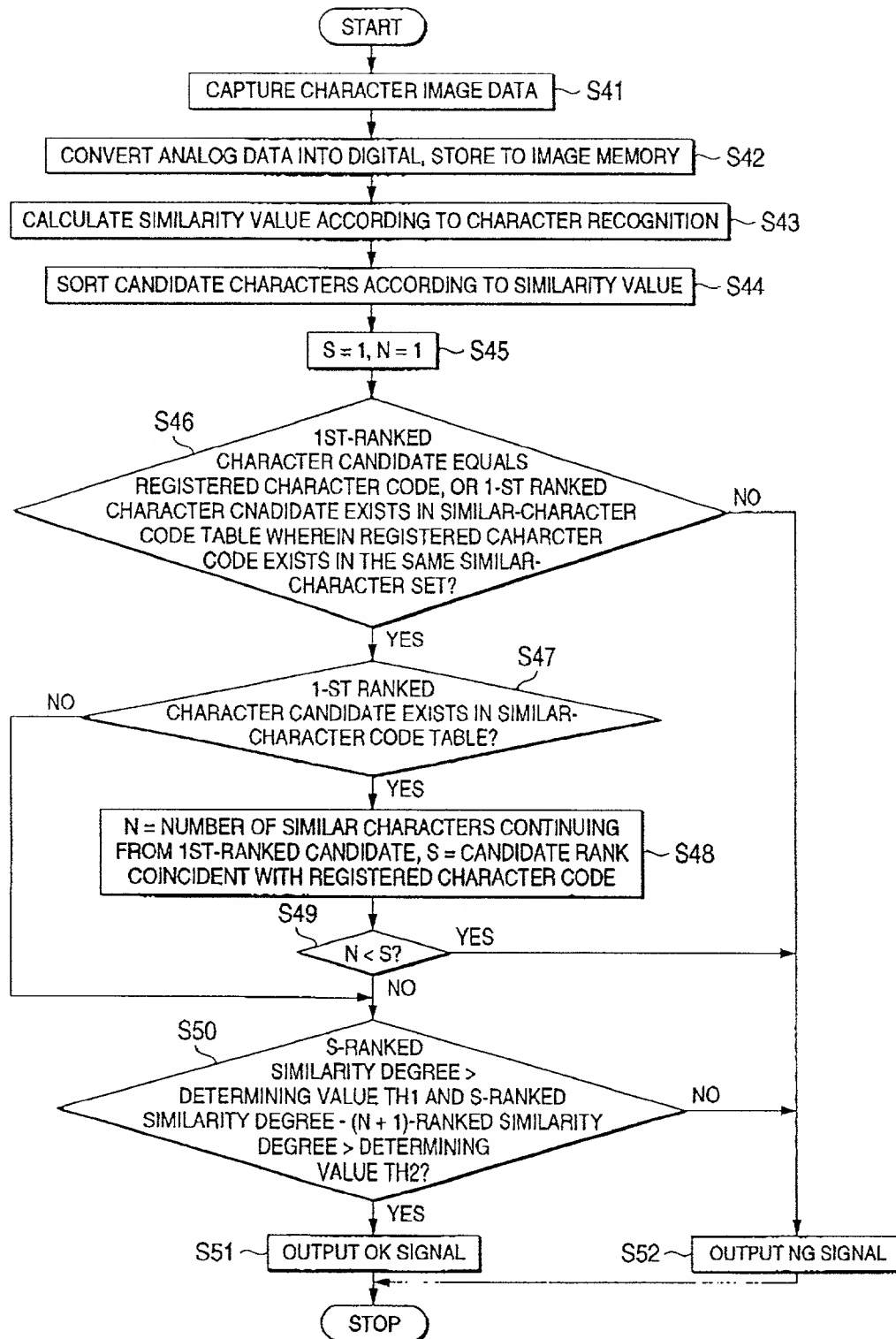


FIG. 34

SORT RESULT ACCORDING TO SIMILARITY DEGREE

RANK	CANDIDATE	SIMILARITY DEGREE
1	I (LOWER CASE I)	90
2	1 (ONE)	89
3	7 (SEVEN)	67
4	I (CAPITAL LETTER I)	65

CONTINUING SIMILAR
CHARACTERS
N = 2

CANDIDATE RANK
COINCIDENT WITH
REGISTERED
CAHACTER CODE
S = 2

FIG. 35

SORT RESULT ACCORDING TO SIMILARITY DEGREE

RANK	CANDIDATE	SIMILARITY DEGREE
1	I (LOWER CASE I)	90
2	I (CAPITAL LETTER I)	65
3	7 (SEVEN)	67
4	1 (ONE)	89

CONTINUING SIMILAR
CHARACTERS
N = 2

CANDIDATE RANK
COINCIDENT WITH
REGISTERED
CAHACTER CODE
S = 4